AUTOSTAR ETX MEADE® 70 • 90 • 105 • 125

ACCESSORY CATALOG

As described in this catalog, a wide range of optional Meade accessories greatly extends many important applications of ETX telescope models, from low-power, wide-field terrestrial viewing to high-power lunar and planetary observing. The premium quality of these Meade accessories is well-suited to the quality of the ETX instruments themselves.

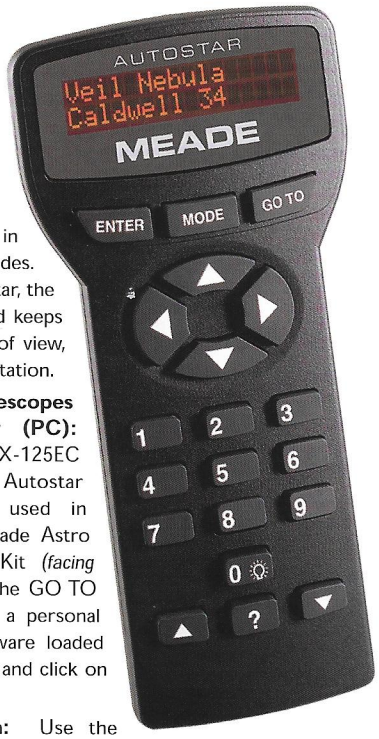
Meade Dealers in the U.S.A. and Canada: For dealer information call the Meade toll-free hotline **1-800-62-MEADE** or visit the Meade website at ***www.meade.com*** for further information.

Meade Instruments Worldwide: Meade astronomical products are offered worldwide in more than 30 countries through Meade international distributors in Europe, Asia, and other areas. Call Meade Instruments at **(949) 451-1450** or visit the Meade website for dealer/distributor information.

Meade #497 Autostar™ Computer Controller

For use with Meade ETX-90EC, ETX-105EC, and ETX-125EC Astro Telescopes.

One of the most important advances in telescope control in the past 25 years, the Meade #497 Autostar Computer Controller turns the ETX-90EC, ETX-105EC, or ETX-125EC into an automatic celestial object locating system. Select any of more than **30,000** celestial objects in the Autostar database, press GO TO, and the telescope **automatically** moves to the object, placing it in the field of view.



Automatic GO TO function to *any* astronomical object of known RA and Dec.

Digital readouts of telescope position (continuously in RA and Dec.), menu options, glossary, and utility functions.

Precise sidereal-rate tracking in either altazimuth or equatorial modes. Once an object is located by Autostar, the telescope automatically tracks it and keeps it centered in the telescope's field of view, fully compensating for the Earth's rotation.

Remote operation of ETX telescopes using a personal computer (PC): ETX-90EC, ETX-105EC, and ETX-125EC telescopes equipped with the Autostar Computer Controller may be used in conjunction with the optional Meade Astro Software/#505 Cable Connector Kit *(facing page)* to operate the telescope in the GO TO mode directly from the display of a personal computer. With Meade Astro Software loaded into the PC, the observer can point and click on any object shown on the PC display.

9-Speed Dual-Axis Operation: Use the Autostar pushbuttons to move the telescope on either or both axes, simultaneously, at any of nine drive speeds, from 2x sidereal to 5°/second.

Object Database: Included within Autostar's database are all of the following astronomical objects — a range of objects certain to keep even the most active amateur astronomer growing in his or her studies of the skies for years:

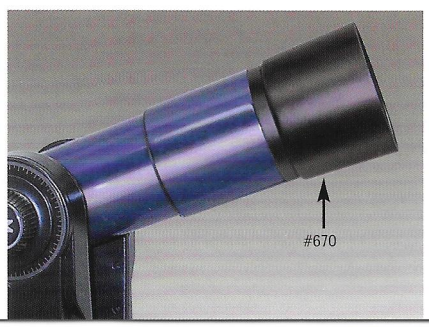
5,386	objects from the Index Catalog (IC); galaxies, nebulae, and star clusters of all types; the complete Index Catalog
7,840	objects from the New General Catalog (NGC); additional galaxies, nebulae, and star clusters of all types; the complete New General Catalog
109	objects from the Caldwell Catalog of the best objects for small telescopes
110	Messier (M) objects; the complete Messier catalog
16,800	stars from the Smithsonian Astrophysical Observatory (SAO) catalog, including double stars, variable stars, and other stars of special note
50	Earth-orbiting satellites
26	asteroids, including all of the brightest asteroids
15	periodic comets
8	major planets from Mercury to Pluto

Plus: over 20 other menu options, including guided tours, major event menus, user-defined terrestrial objects, and much more.

Note: The #497 Autostar is not compatible with the ETX-90RA Astro Telescope.

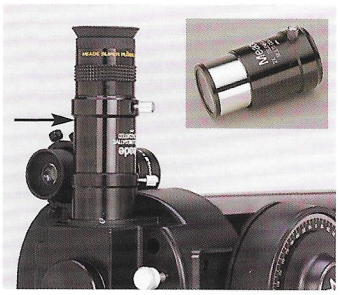
Dew Shields for ETX:

Threads into the front-lens cell and effectively inhibits the formation of dew on the lens surface. **#670** for ETX-70; **#673** for ETX-90; **#675** for ETX-105; **#678** for ETX-125.



Barlow Lenses:

A multiplier lens, the Barlow Lens doubles or triples the power of all eyepieces with which it is used. Insert the Barlow into the telescope's eyepiece holder first, followed by an eyepiece. By itself, for example, the SP 26mm eyepiece yields a power of 48X with 90mm ETX telescope models; when used in conjunction with the #126 2x Barlow Lens, this eyepiece yields 96X.



Meade achromatic, high-performance, short-focus Barlow Lenses are perfectly suited to the low-profile design of any ETX telescope model. Lens surfaces are multi-coated for maximum image contrast and light transmission. Barlow lenses are intended for astronomical applications and accept any eyepiece of 1.25" barrel diameter.

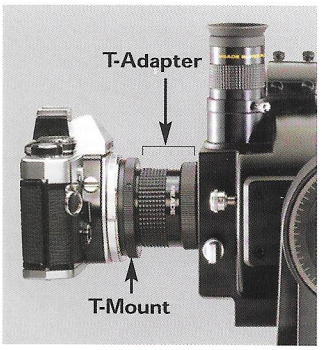
#124 2x Barlow Lens and #128 3x Barlow Lens: for ETX-70AT

#126 2x Barlow Lens: for ETX-90EC, ETX-105EC, ETX-125EC

T-Adapters:

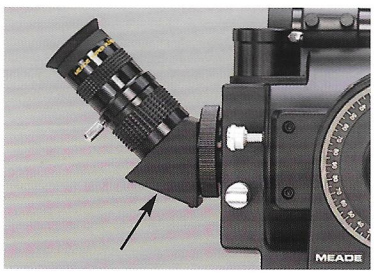
The basic means of photography through any ETX Astro Telescope or Spotting Scope, the T-Adapter threads to the rear cell of the telescope, followed by a T-mount appropriate to the user's brand of 35mm camera. In this way the camera body is rigidly coupled to the telescope's optical system, which in effect becomes the camera's lens.

Refer to your ETX Instruction Manual for important tips on photography through ETX telescopes.



#64 T-Adapter: for ETX-90EC, ETX-105EC, ETX-125EC

#64ST Photo Adapter: for ETX-70AT



45° Erecting Prism:

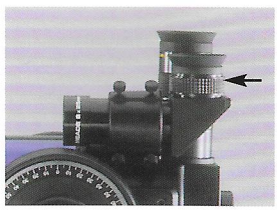
All ETX models include an internal optical-flat mirror to reflect light to the telescope's 90° astronomical observing position; in this position the telescope's image is upright, but reversed. For terrestrial observing with an ETX-70, ETX-90, ETX-105, or ETX-125 Astro Telescope the 45° Erecting Prism results in a fully correctly oriented image and a convenient 45° observing angle. The #932 45° Erecting Prism is included as standard-equipment with ETX Spotting Scopes.

#932 45° Erecting Prism: for ETX-90EC, ETX-105EC, ETX-125EC

#933 45° Erecting Prism: for ETX-70AT

8 x 25mm Right-Angle Viewfinder:

Included as standard-equipment on ETX-105EC and ETX-125EC models, the 8 x 25mm Right-Angle Viewfinder *(see arrow in photo)* permits a comfortable 90° viewing position with 90mm and 70mm ETX models as well. The #825 fits into the same bracket as the standard-equipment 8 x 21mm finder supplied with ETX-90EC telescopes. The #827 attaches to the ETX-70AT with a viewfinder bracket, included. The finder's wide-angle 7.5° actual field facilitates object-location.



#825 8 x 25mm Right-Angle Viewfinder: for ETX-90EC

#827 8 x 25mm Right-Angle Viewfinder: for ETX-70AT

Meade Premium-Grade Eyepieces

To expand the magnification (power) range of your ETX telescope.

Eyepieces: Meade Series 4000 Super Plössl (SP), Super Wide Angle (SWA) and Ultra Wide Angle (UWA) Eyepieces provide extremely high-resolution imaging. The world standard in telescope oculars, Meade Series 4000 eyepieces yield the widest possible fields of view, consistent with pinpoint edge-of-field sharpness and long eye relief — and yet with extremely low astigmatism, spherical aberration, and off-axis color. Incorporating 7-layer multi-coatings and edge-blackened optics for optimum image contrast, these sophisticated 4- to 8-element designs permit levels of optical performance generally impossible to achieve with eyepieces of fewer elements.

A useful selection includes the SP 9.7mm, SP 12.4mm, and SWA 18mm; UWA 4.7mm and 6.7mm eyepieces are well suited for high power observing of the Moon and planets. In the standard American-size (1.25") barrel diameter, Series 4000 eyepieces permit a wide range of magnifying powers with each telescope, while optimizing ETX image resolution. Powers obtained with each eyepiece are as follows:

	ETX-70			ETX-90		ETX-105		ETX-125	
Eyepiece	Power	With 2x Barlow	With 3x Barlow	Power	With 2x Barlow	Power	With 2x Barlow	Power	With 2x Barlow
SP 6.4mm	55X	109X	164X	195X	390X**	230X	459X	297X	594X**
SP 9.7mm	36X	72X	108X	129X	258X	152X	303X	196X	392X
SP 12.4mm	28X	56X	85X	101X	202X	119X	237X	153X	306X
SP 15mm	23X	47X	70X	83X	166X	98X	196X	127X	253X
SP 20mm	18X	35X	53X	63X	126X	74X	147X	95X	190X
SP 26mm *	13X	27X	40X	48X	96X	57X	113X	73X	146X
SP 32mm	N/A	N/A	N/A	39X	78X	46X	92X	59X	119X
SP 40mm	N/A	N/A	N/A	31X	62X	37X	74X	48X	95X
SWA 13.8mm	25X	51X	76X	91X	182X	107X	213X	138X	275X
SWA 18mm	19X	39X	58X	69X	138X	82X	163X	106X	211X
SWA 24.5mm	14X	29X	43X	51X	102X	60X	120X	78X	155X
UWA 4.7mm	74X	149X	223X	266X	N/A	313X	626X	404X	N/A
UWA 6.7mm	52X	104X	157X	187X	374X**	219X	439X	284X	567X**

* Included as standard-equipment with ETX-90, ETX-105, and ETX-125.

** Use only under steady atmospheric conditions.

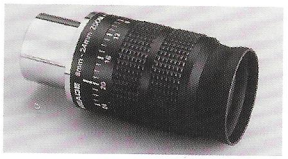
Meade 4-element Super Plössls, designed to utilize the very latest in optical glass types, are excellent general-purpose eyepieces with any ETX model.

Super Wide Angles: These 6-element eyepieces, with their 67° fields, offer exquisite wide-angle images at low-to-medium powers, ideal for star fields, galaxies, and other deep-space phenomena.

Ultra Wide Angles: The ultimate in modern eyepieces, Meade 8-element Ultra Wide Angle eyepieces permit extreme image fidelity and sharpness over an amazing 84° apparent field. For moderate-to-high-power applications Meade Ultra Wide Angle oculars provide an uncommon observing experience.

Meade 4-element Plössl (PL) Eyepieces are specifically designed for use with the ETX 70mm model and yield higher powers; 88X (PL 4mm), 70X (PL 5mm), 58X (PL 6mm) and 19X (WA 18mm). Higher magnifications are particularly useful in observations of the Moon and planets. Keep in mind, however, that steady atmospheric conditions are particularly important at higher powers. The 4-element wide angle WA 18mm eyepiece yields extremely wide fields of view, ideal for scanning star fields or for terrestrial applications.

Series 4000 8mm to 24mm Zoom Eyepiece: This high-resolution, 7-element multi-coated zoom eyepiece is an excellent complement to all ETX-90, ETX-105, and ETX-125 telescope models, for either astronomical or terrestrial applications. A graduated scale in 1mm units indicates the exact focal length in use. On ETX-90 models the Zoom Eyepiece yields continuously variable magnifications from 52X to 156X; on ETX-105 models it yields magnifications from 61X to 184X; on ETX-125 models it yields magnifications from 79X to 237X.



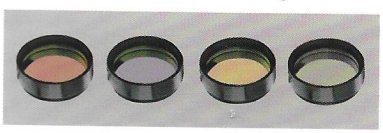
Astro Software / Cable Connector Kit: Meade astro software displays over 10,000 astronomical objects — galaxies, nebulae, star clusters, stars, and planets — on your (Windows-based) PC, enabling even the beginner to locate and identify objects to observe with the telescope or to print out star charts for use in observing sessions. In addition to the applications described earlier (see #497 Autostar) the Cable Connector Kits may be used to upload into Autostar information downloaded from the Internet to your PC, to locate with your telescope a wide range of celestial objects and earth satellites, including the Space Shuttle and International Space Station. The #505 Kit also allows for the connection of two #497 Autostar handboxes together, permitting downloading from one handbox to another.

#505 Astro Software/Cable Connector Kit: for ETX-90EC, ETX-105EC, and ETX-125EC

#506 Astro Software/Cable Connector Kit: for ETX-70AT

Hard Carrying Cases: For secure portability of ETX Astro Telescope models in the field, Meade Hard Carrying Cases are fully lined with fitted foam inserts and accept the complete ETX-70AT, ETX-90RA, ETX-90EC, ETX-105EC, or ETX-125EC Astro Telescopes, plus optional accessories. **#773 Hard Case** (19" x 15" x 9") for ETX-70AT; **#774 Hard Case** (19" x 14" x 7") for ETX-90EC and ETX-90RA models; **#776 Hard Case** (20" x 16.5" x 9.5") for ETX-105EC; **#775 Hard Case** (23" x 15" x 11") for ETX-125EC.

#3200 Lunar & Planetary Color Filter Set: Meade optical glass color filters increase image contrast and resolution on the Moon and planets and reduce glare of the full or near-full Moon. The #3200 Set includes red, yellow, blue, and neutral density filters. Each filter threads into the barrels of all Meade MA, PL, and WA eyepieces and is packed in a separate plastic case for secure storage.



Soft Carry Bags: Meade soft-padded carry bags are well-suited to travel with ETX-90 Astro Telescope models or the ETX-90 Spotting Scope. Each carry bag includes a shoulder strap and permits ready transport of the complete telescope, including accessories. **#765 Soft Carry Bag:** for ETX-90EC and ETX-90RA Astro Telescopes; **#766 Soft Carry Bag:** for ETX-90 Spotting Scope.

Meade ETX-125EC Astro Telescope. Shown with optional #497 Autostar Computer Controller and with #884 Deluxe Field Tripod in 90° (altazimuth) orientation.

Meade ETX-90EC Astro Telescope, shown with #884 Deluxe Field Tripod in equatorial orientation.

Meade ETX-70AT Astro Telescope. Shown with optional #882 Standard Field Tripod.

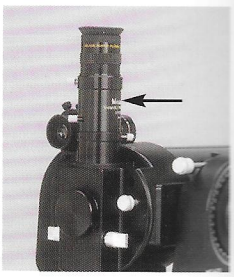
#884 Deluxe Field Tripod

(left) **#884 Deluxe Field Tripod for ETX-90EC, ETX-105EC, ETX-125EC:** The full-length #884 Deluxe Field Tripod is constructed of strong, lightweight steel, and provides a rigid mounting platform for virtually any observing application for the ETX-90EC, ETX-105EC, and ETX-125EC. Tripod height is continuously adjustable from 25" to 43" to allow for standing or seated observations. Graduated scale for elevation angle permits precise polar alignment of the telescope's fork mount for astronomical applications. Elevation angle can be fixed at any observing latitude between 20° and 90°. For land viewing, where altazimuth orientation of the telescope is desirable, the tripod head tilts and locks to 90°. Net tripod weight is 11 lbs. Includes custom-fitted carry bag with strap, handles and pocket for accessories.

Note: The #884 Tripod is not compatible with ETX Spotting Scopes.

Table Tripods: ETX-90EC, ETX-105EC, and ETX-125EC models permit pushbutton tracking of astronomical objects from their standard-equipment Electronic Controllers. For fully automatic tracking a table tripod, or the #884 Deluxe Field Tripod, may be added, allowing for polar alignment of the telescope. Each table tripod includes two fixed legs and two variable-length legs inscribed with a range of latitude settings for quick polar alignment. At observing latitudes below about 25° the optional **#1422 Low-Latitude Balance Weight** *(not shown)* is recommended for ETX-90 Astro Telescope models; the low-latitude balance weight is included with the table tripod for ETX-105EC and ETX-125EC Astro Telescopes. **#880 Table Tripod:** for ETX-90EC; **#881 Table Tripod:** for ETX-105EC, ETX-125EC.

#905 Variable Polarizing Filter (1.25"): *(right)* For glare-reduction in observing the Moon the #905 Variable Polarizer includes two Polarizer filters mounted in a specially-machined cell. The #905 permits variable settings of light transmission between 5% and 25%, to account for varying lunar surface brightness according to the phase of the Moon and the magnification and aperture of the telescope. Accepts 1.25" eyepieces.



Electric Focusers: Meade-engineered for smooth, rapid focusing of the image with most ETX models, each focuser includes coarse and microfine speeds. The standard-equipment hand controller accepts one (user-supplied) 9-volt battery and focuses the ETX-90RA as well as the ETX-90 and ETX-125 Spotting Scopes. On ETX-90EC, ETX-105EC and ETX-125EC telescopes the focuser plugs into, and is powered by, the telescope's control panel, with operation effected through either the Electronic Controller or Autostar handboxes. **#1244:** for ETX-90 and ETX-105 models; **#1247:** for ETX-125 models.

#882 Standard Field Tripod

For the ETX-70AT Astro Telescope.

Designed exclusively for the ETX-70AT telescope, the #882 Field Tripod includes all the rigidity and stability required for high-power astronomical observing. The lightweight aluminum #882 Tripod permits altazimuth (vertical-horizontal) alignment of the telescope and easily adjusts for standing or seated observations through the telescope. Each tripod includes an accessory shelf to hold eyepieces and the Autostar hand controller, and is packed in a rugged Cordura-type carry bag for transport in the field.

Power Adapters and Cords: In addition to their internal battery packs ETX-90EC, ETX-105EC, and ETX-125EC telescopes may be powered from standard 115v AC home electricity with the **#541 AC Adapter.** The #541 plugs into any standard home outlet and includes a 25 ft. cord connecting to the telescope's control panel. Alternately, the telescopes may be powered in the field from an automobile cigarette lighter plug by using the **#607 Power Cord ,** a 25 ft. cord which plugs into the telescope's control panel and supplies 12v DC directly from the car battery.

The **#546 AC Adapter** allows you to power an ETX-70AT from standard 115v home electricity. The #546 conveniently connects to the telescope's battery snaps.

Meade Instruments Corporation

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